Governor's Office of Economic Development

Renewable Energy Development Incentive (REDI)

Refundable Tax Credit for up to 100%
of **New State Revenue**:

1) **Wage withholding taxes paid on behalf of employees (5%)**
2) **Corporate/Partnership income tax (5% of revenue)**
3) **State portion of sales tax (4.7%)**

Governor's Office of Economic Development

Solar
Hydro
Wind
Biomass
Geothermal
Waste Gas/Heat Recovery
Nuclear
Petroleum Coke
Shale Oil
Tar Sands

Governor's Office of Economic Development

1) **Generators of Utility-Scale Renewable Energy**

2) **Manufacturers of Renewable Energy Components**

Governor's Office of Economic Development

1) **Direct capital investment into a renewable energy zone**
2) **Must create new, high-paying jobs**
3) **Pay at least 125% of urban county wage or 100% of rural county wage**
4) **Company must demonstrate stability and sustainability**
5) **Local government incentive**
6) **Must generate New State Revenue**

Utah Dept of Workforce Services (DWS)

Utah's State Energy Sector Partnership (SESP)

Utah State Energy Sector Partnership

- $4.6 million awarded by the U.S. Department of Labor's Employment and Training Administration
  - Funded by the American Recovery and Reinvestment Act (ARRA)
  - $887,025 set aside for workers impacted by automotive related restructuring in Box Elder County

Energy Sectors

- Green Construction
  - Retrofit
  - Hazardous materials removal
- Alternative Fuels
  - Natural gas extraction and storage
  - Vehicle conversion and maintenance
- Energy Management/Efficiency
  - Assessment
  - Audit
  - Weatherization
- Renewable & Energy Transmission
  - Solar
  - Solar thermal
  - Geo thermal
  - Wind
  - Smart Grid technologies

STATE CORE ENERGY CURRICULUM

Sector

Energy Management/Efficiency & Renewable Energies

Industries

Occupations

Green Construction	Energy Management/ Efficiency	Renewable & Energy Transmission	Alternative Fuels
Design / Solar Systems	Energy Management/ Auditing	Solar	CNG/LNG
Hazardous Materials Handling and Removal	Weatherization	Wind	Hybrid
Retrofit / HVAC systems Installation	Inspection	Geothermal	Natural Gas Measurement Tech
		Smart Grid	

Statewide Energy Management Efficiency & Renewable Energies

Technical Foundations and Integrated Skill Sets

Energy Essentials	Computer Skills	Applied Math	Safety Regulations	Technical Writing
Essentials			OSHA	
Processing			First Aid + CPR	
Delivery				

SESP Business Partners

- Intermountain Electronics
- BRUNO Engineering Inc
- Williams Pipeline
- First Wind
- Go CNG
- Shoshone Geothermal Energy
- Simplure/True Power
- Progressive Power Solutions Inc
- Kern River
- Ivory Homes
- Big D Construction
- Gardner Engineering

SESP Educational Partners

- Salt Lake Community College
- Utah State University – College of Eastern Utah
- Uintah Basin Applied Technology College
- Southwest Applied Technology College
- Davis Applied Technology College
- Bridgerland Applied Technology College

Priority Populations

- Veterans
- Dislocated Workers
- At risk workers, including workers impacted by
  - Automotive restructuring
  - National Energy and Environmental Policy
- Disadvantaged youth

jobs.utah.gov/services/grants/sesp

jobs.utah.gov/services/grants/sesp

Energy Academy Locations and Training Specialization:
(Program offerings will expand across the state as curriculum is developed - check back for updates)

- Salt Lake Community College
  - **Green Construction** – Solar Panel Installation, Solar Thermal Water Installation, Hazardous Materials Handling, Removal and Disposal, Commercial and Industrial Retro-fit and Construction
  - **Alternative Fuels** – CNG Vehicle Conversion (Inspection & Maintenance), Hybrid Vehicle Inspection & Maintenance, Natural Gas Measurement Technician
  - **Energy Management/Efficiency** – Energy Audits (Assessment and Conservation Analysis), Weatherization
  - **Renewable Energy & Transmission** – Smart Grid
- Utah State University – College of Eastern Utah
  - **Alternative Fuels** – CNG Vehicle Conversion (Inspection & Maintenance), Hybrid Vehicle Inspection & Maintenance, Natural Gas Measurement Technician
  - **Green Construction** – Residential Retro-fit, Hogan Construction, Navajo Reservation
  - **Energy Management/Efficiency** – Energy Audits, HVAC Installation
- Uintah Basin Applied Technology College
  - **Alternative Fuels** – CNG Vehicle Conversion (Inspection & Maintenance), Hybrid Vehicle Inspection & Maintenance, Natural Gas Measurement Technician
  - **Green Construction** – Residential Retro-fit
- Davis Applied Technology College
  - **Green Construction** – Solar Panel Installation, Solar Thermal Water Installation, Hazardous Materials Handling, Removal and Disposal, Retro-fitting and HVAC installation
  - **Energy Management/Efficiency** – Energy Management Technician (Assessment, Audit and Weatherization)
  - **Renewable Energy & Transmission** – Composites Manufacturing materials used in wind farms and other green/energy efficient products
- Southwest Applied Technology College
  - **Renewable Energy & Transmission** – Wind, Solar, Geo-Thermal, Smart Grid
- Bridgerland Applied Technology College
  - **Green Construction** – Solar Panel Installation, Solar Thermal Water Installation, Hazardous Materials Handling, Removal and Disposal
  - **Alternative Fuels** – CNG Vehicle Conversion (Inspection & Maintenance), Hybrid Vehicle Inspection & Maintenance, Natural Gas Measurement Technician
  - **Energy Management/Efficiency** – Energy Audits (Assessment and Conservation Analysis), Weatherization
  - **Renewable Energy & Transmission** – Wind, Solar

To determine if this program is right for you please log into your account or register here. Select the "Apply for Training Services" link, and then select the application button. Once you have completed the application please send an e-mail with your contact information to sesp@utah.gov

For additional information please email sesp@utah.gov

Feedback | Equal Opportunity | Contact Us | Utah.gov Home | Terms of Use | Privacy Policy | Accessibility Policy | Translate page
©2010 State of Utah

To Contact DWS

Melisa Stark
mstark@utah.gov
801-628-4051

jobs.utah.gov/services/grants/sesp.html




Utah Governor's Office *of* Economic Development

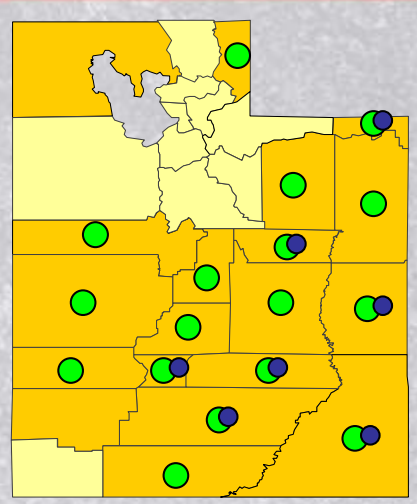
Business Incentives & Growth





BUSINESS RESOUCE CENTERS ■ CAPITAL FORMATION ■ CENTERS OF EXCELLENCE ■ CORPORATE INCENTIVES UTAH ■ UTAH FILM COMMISSION ■ INTERNATIONAL DEVELOPMENT OFFICE ■ OFFICE OF CONSUMER HEALTH SERVICES ■ PROCUREMENT ASSISTANCE ■ OFFICE OF RURAL DEVELOPMENT ■ STATE SCIENCE ADVISOR ■ UTAH OFFICE OF TOURISM

Rural Development Programs

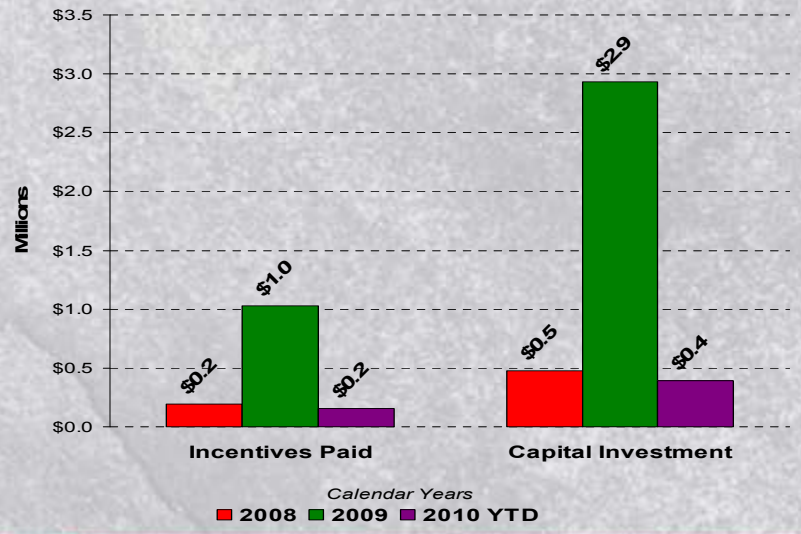


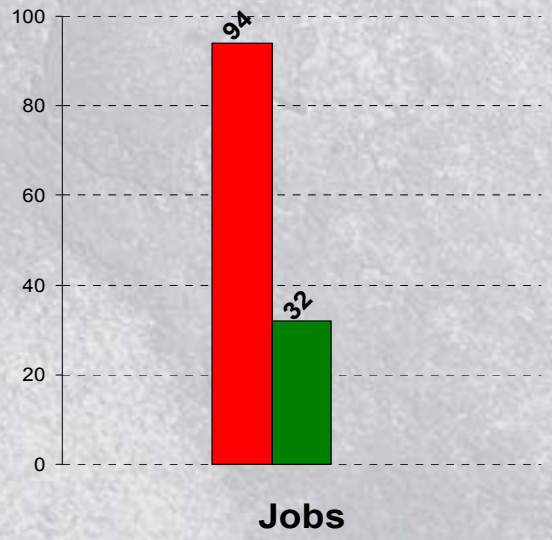
Rural Fast Track - provides post-performance grants to small business expanding in rural Utah.

Enterprise Zones - provides tax credits to businesses creating new jobs, investing in plant and equipment and providing health insurance.

Targeted Business Tax Credits - provides tax credits based on job creation and capital investment in rural counties with high unemployment.

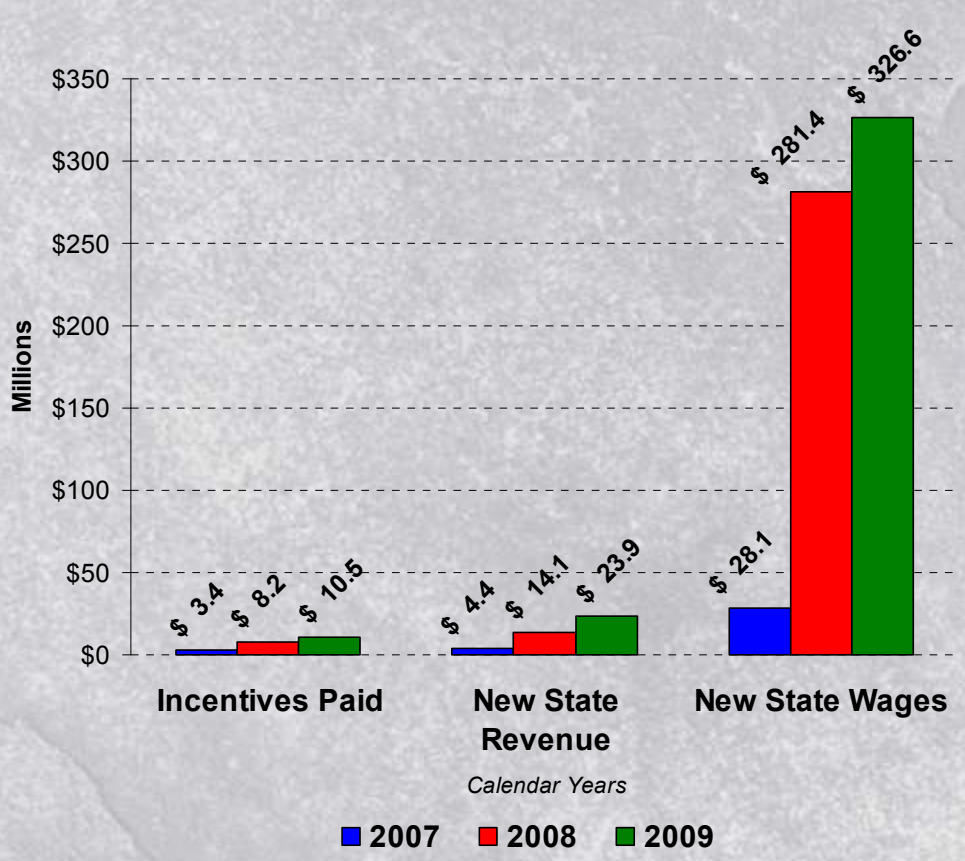
Rural Development Grants - provides matching funds for projects to enhance economic development initiatives in rural communities.

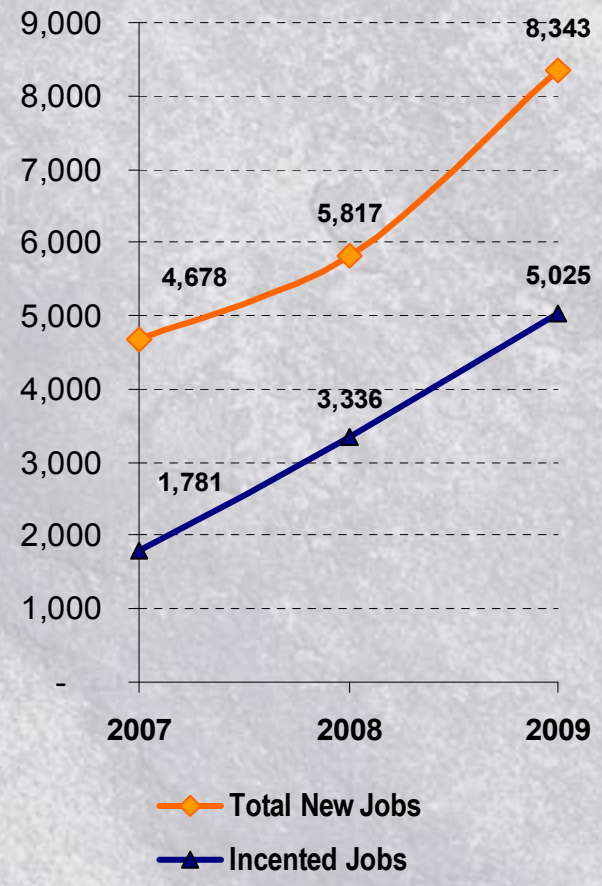




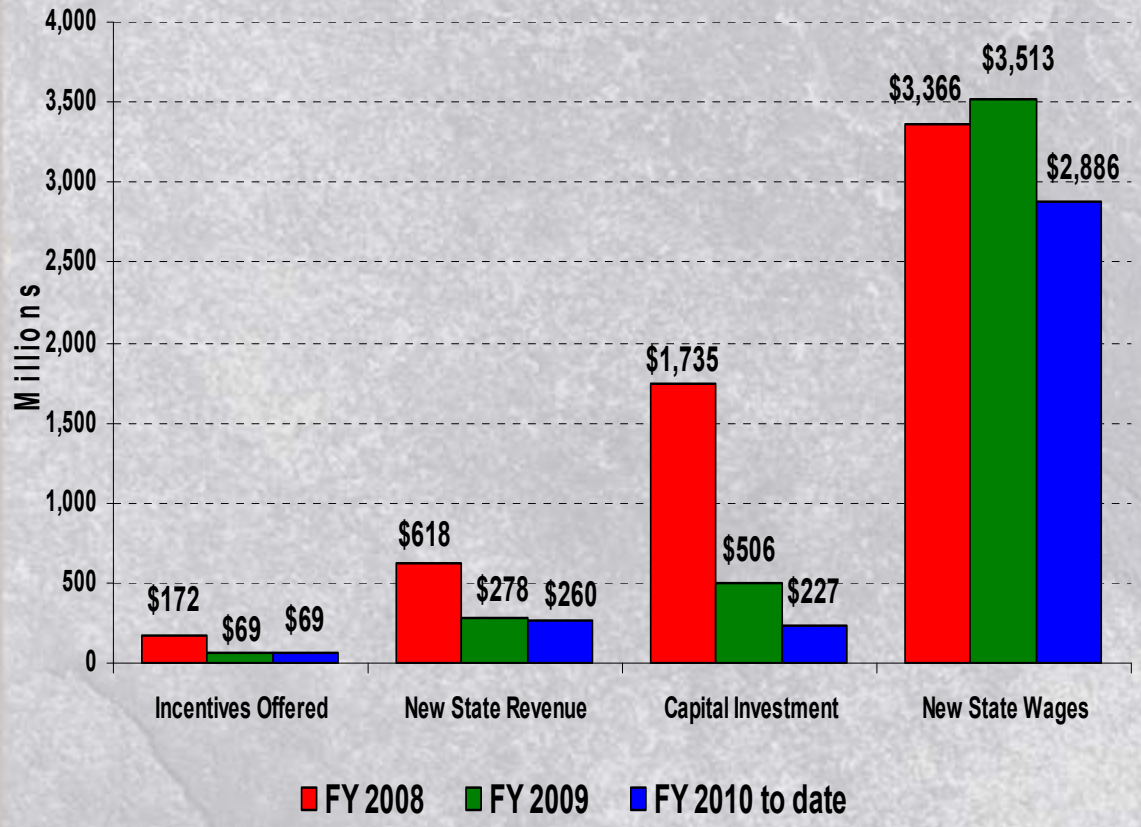
Corporate Recruitment - Actuals

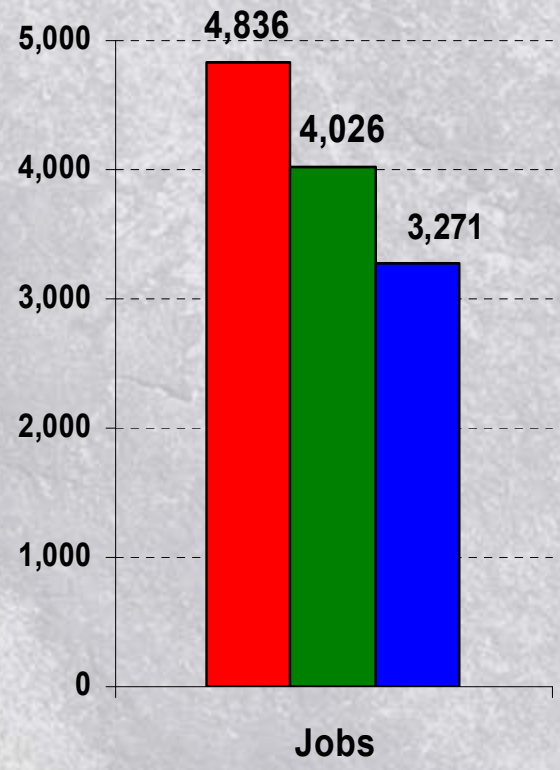
EDTIF and IAF Programs





Corporate Recruitment – Incentive Offers

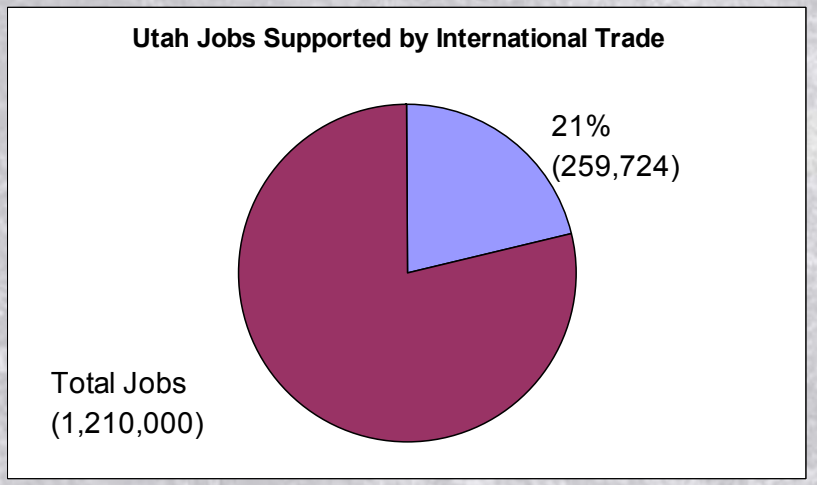


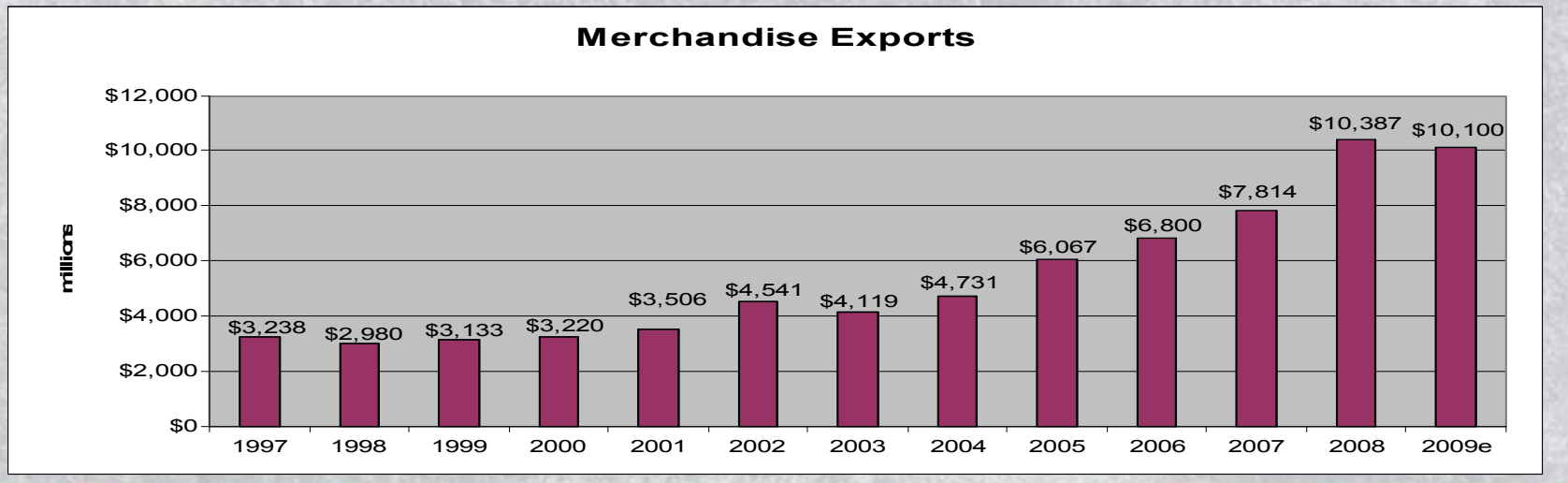


International Trade & Diplomacy

- SUPPORT Utah businesses
- INCREASE international trade
- LEVERAGE diplomatic contacts

Companies assisted per year	420
Trainings held per year	35
Companies trained per year	845





Utah Department of Workforce Services

Green Jobs Survey

Renewable Energy Business Summit
11/15/10

DWS Division of Workforce Research and Analysis

Commissioned by the State of Utah and Department of Labor to:

- *Operate Utah's Bureau of Labor Statistics programs*
- *Provide state, regional and local economic analysis*
- *Conduct specialized labor market studies such as the Job Vacancy Survey, Benefits Survey and Green Jobs Survey*

Renewable Energy Business Summit
11/15/10

The Northern Plains & Rocky Mountain Consortium

Utah, Iowa, Montana, Nebraska, South Dakota and Wyoming

Benefits

- Common definition of “green”
- Regional estimates
- Shared expertise

Renewable Energy Business Summit – 11/15/10

Why conduct a GJS?

Why study any aspect of the economy?

- The economy is ever changing
- Anyone wish they would have reorganized their 401k in 2007?

Differences in demand for labor

- Employer expectations of job applicants evolves
- Know any blacksmiths?

Renewable Energy Business Summit - 11/15/10

Defining *Green*

A Green Business:

- Operates to produce a green economic product or service

A Green Job:

- Directly performs green-related activities as part of their core job duties.

Renewable Energy Business Summit - 11/15/10

Defining Green Economic Activities

Energy Efficiency and Conservation

- Manufacturing, construction or installation of energy efficient products such as weatherization, retrofitting and transportation technology

Renewable Energy and Alternative Fuels

- Manufacturing, construction, research, or delivery of wind, solar, biomass, hydro or geothermal as a fuel source

Renewable Energy Business Summit - 11/15/10

Defining Green Economic Activities (cont.)

Pollution, waste, and greenhouse gas management, prevention and reduction	Environmental clean-up and restoration, and waste clean-up
• Reducing greenhouse gas emissions, waste water and other pollutants	• Clean-up and disposal of waste, hazardous materials and landfill restoration

Renewable Energy Business Summit - 11/15/10

Defining Green Economic Activities (cont.)

Education, regulation, compliance, public awareness, training and energy trading	Sustainable agriculture and natural resource conservation
• Activities that educate on energy efficiency, enforcement of compliance requirements and training on effective use of energy related products and processes	• Low carbon and organic agriculture, land management, water management and conservation

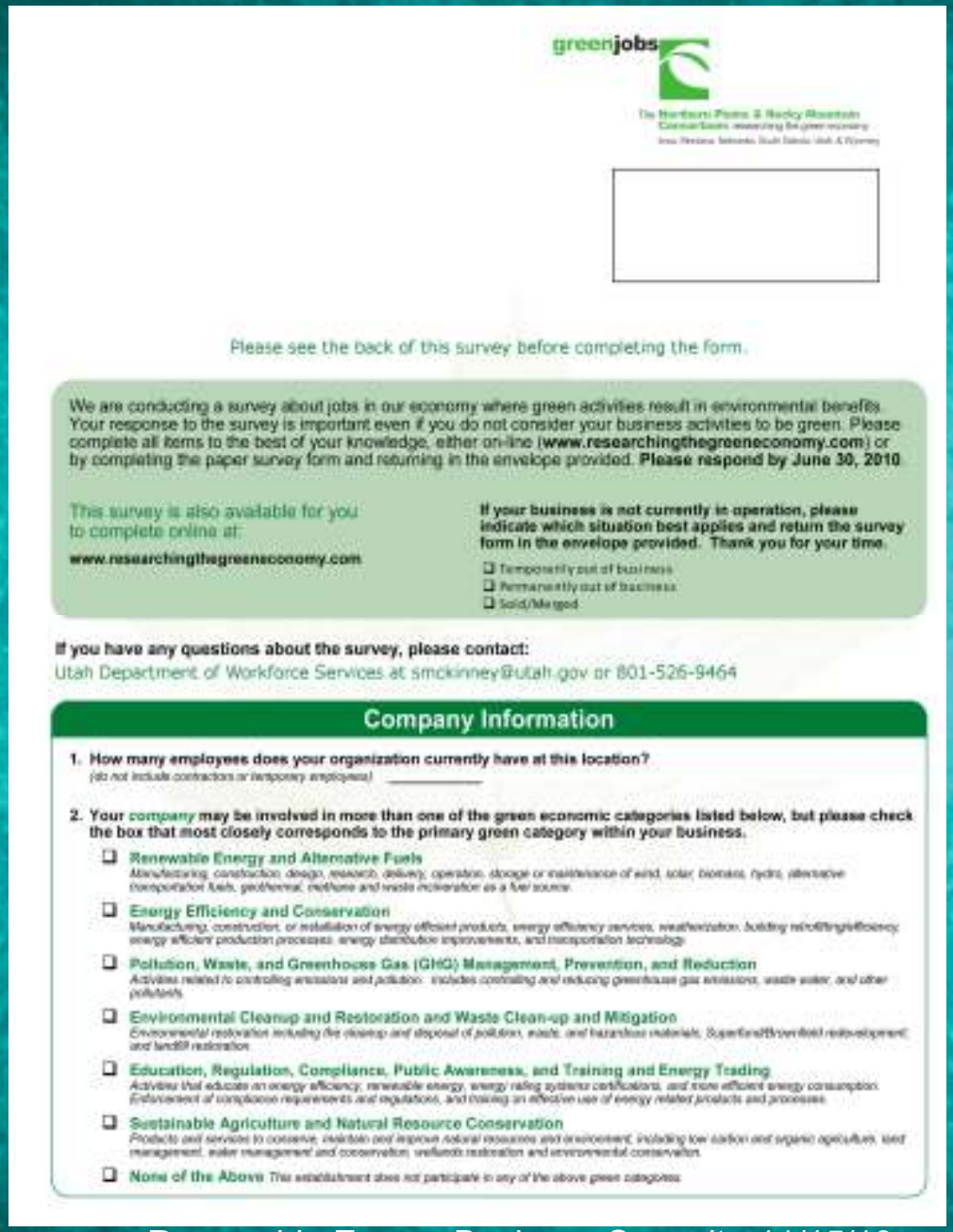
Renewable Energy Business Summit - 11/15/10

Sample

Randomly sampled approximately 11,800 Utah employers:

- On a statewide level
- Of all sizes
- Across 19 industry supersectors

Renewable Energy Business Summit - 11/15/10



greenjobs

Please see the back of this survey before completing the form.

We are conducting a survey about jobs in our economy where green activities result in environmental benefits. Your response to the survey is important even if you do not consider your business activities to be green. Please complete all items to the best of your knowledge, either on-line (**www.researchingthegreeneconomy.com**) or by completing the paper survey form and returning in the envelope provided. **Please respond by June 30, 2010**

This survey is also available for you to complete online at:

www.researchingthegreeneconomy.com

If your business is not currently in operation, please indicate which situation best applies and return the survey form in the envelope provided. Thank you for your time.

- ❑ Temporarily out of business
- ❑ Permanently out of business
- ❑ Sold/Merged

If you have any questions about the survey, please contact:

Utah Department of Workforce Services at smckinney@utah.gov or 801-526-9464

Company Information

1. **How many employees does your organization currently have at this location?**
   (do not include contractors or temporary employees) _____

2. **Your company may be involved in more than one of the green economic categories listed below, but please check the box that most closely corresponds to the primary green category within your business.**

   - ❑ **Renewable Energy and Alternative Fuels**
     Manufacturing, construction, design, research, delivery, operation, storage or maintenance of wind, solar, biomass, hydro, alternative transportation fuels, geothermal, methane and waste incineration as a fuel source.
   - ❑ **Energy Efficiency and Conservation**
     Manufacturing, construction, or installation of energy efficient products, energy efficiency services, weatherization, building retrofitting/efficiency, energy efficient production processes, energy distribution improvements, and transportation technology.
   - ❑ **Pollution, Waste, and Greenhouse Gas (GHG) Management, Prevention, and Reduction**
     Activities related to controlling emissions and pollution. Includes controlling and reducing greenhouse gas emissions, waste water, and other pollutants.
   - ❑ **Environmental Cleanup and Restoration and Waste Clean-up and Mitigation**
     Environmental restoration including the cleanup and disposal of pollution, waste, and hazardous materials, Superfund/brownfield redevelopment, and landfill restoration.
   - ❑ **Education, Regulation, Compliance, Public Awareness, and Training and Energy Trading**
     Activities that educate on energy efficiency, renewable energy, energy rating systems certifications, and more efficient energy consumption. Enforcement of compliance requirements and regulations, and training on effective use of energy related products and processes.
   - ❑ **Sustainable Agriculture and Natural Resource Conservation**
     Products and services to conserve, maintain and improve natural resources and environment, including low carbon and organic agriculture, land management, water management and conservation, wetlands restoration and environmental conservation.
   - ❑ **None of the Above** *This establishment does not participate in any of the above green categories.*

Renewable Energy Business Summit
11/15/10

3. Based on these instructions, how many employees at this location perform green-related activities? _____

Please fill out the matrix below by job title for your green employees. If you have no green employees, continue to the next page.

Job Title & Brief Description	Total Employees	Minimum Education/Training Requirement	Special Requirements	Number of workers having green job responsibilities (Based on percent of time dedicated to green work)			Indicate the number of workers having green job responsibilities in each wage category. (please do not include the value of benefits)												Recently Created or Modified Jobs?	Current Vacancies[1]	Projected Job Creation or Loss	
Only list current jobs which produce a product or service that can be considered green. List job title and briefly describe duties related to green related activities.	Number of employees that have this job duty.	Use the following codes: 1 = No Requirements 2 = HS Diploma/GED 3 = Post-HS, No Degree 4 = Apprenticeship/ On-The-Job Training 5 = Trade Certified 6 = Vocational Degree 7 = Associate Degree 8 = Bachelors Degree 9 = Graduate/Professional Degree	Please list any required licenses, certificates or other training above and beyond the normal requirements of this occupation which are necessary due to the green activities of this position.	Between 1% - 49%	Between 50% - 99%	100%	Hourly Wage	Under $9.20	$9.20 - $9.66	$9.66 - $14.46	$14.50 - $18.24	$18.25 - $22.74	$22.75 - $28.74	$28.75 - $35.86	$36.00 - $45.24	$45.25 - $56.86	$57.00 - $71.66	$71.50 - $89.86	$90.00 and over	How many of these jobs were created as green positions or modified to include green tasks since January 2009?	How many current vacancies does your organization have in the green job?	How many jobs do you expect to create/lose in this position within the next 2 years?	
							Annual Salary	Under $19,240	$19,240 - $23,919	$23,920 - $30,159	$30,160 - $37,959	$37,960 - $47,319	$47,320 - $59,759	$59,800 - $74,619	$74,880 - $94,119	$94,120 - $118,559	$118,560 - $148,719	$148,720 - $187,199	$187,200 and over			Create	Lose
Example: Wind Turbine Technician - Installs & repairs wind turbines	*7*	*5*	*Renewable energy technician certification*	*2*	*4*	*1*					*6*	*1*							*2*	*1*	*3*	*1*
1.																						
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						
11.																						
12.																						
13.																						
14.																						
15.																						

Renewable Energy Business Summit
11/15/10

Results

Witnessed a statistically valid 47% response rate

Over 400 companies reported having at least one green job

Over 500 companies reported being engaged in a primary green activity

Renewable Energy Business Summit - 11/15/10

Results (cont.)

Most frequently cited green economic categories

- Energy efficiency and conservation
- Sustainable agriculture and natural resource conservation
- Pollution, waste, and greenhouse gas management, prevention and reduction

Renewable Energy Business Summit – 11/15/10

Results (cont.)

Most frequently cited green jobs

- Environmental engineers
- Green building contractors
- Energy managers

Renewable Energy Business Summit - 11/15/10

Future Analysis

- Apply statistical weighting and create estimate for green jobs employment percentage in Utah and for the region
- Determine concentration of green jobs employment by industry
- Determine concentration of green jobs by “traditional” occupation
- Develop employment projections for green jobs

Renewable Energy Business Summit – 11/15/10

To Contact DWS WRA

Nate Talley

natetalley@utah.gov

(801) 526-9323

http://jobs.utah.gov

140 East 300 South, SLC

Renewable Energy Business Summit - 11/15/10

Accelerating Utah's Energy Cluster: Salt Lake Community College

Renewable Energy Business Summit - 11/15/10
Renewable Energy Business Summit - 11/15/10

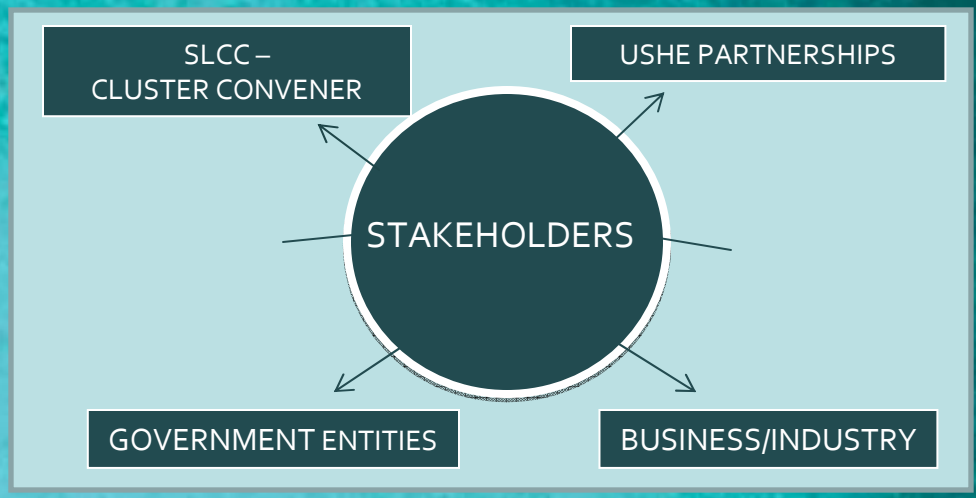
UCAP Objectives

- Accelerate growth in industry clusters that are strategic for Utah
- Enhance the role of USHE institutions as regional hubs of economic activity and as a network of support and expertise
- Integrate, align and leverage resources (across higher education institutions, between USHE, DWS, GOED, USTAR, and other state agencies)
- Create a template for action that is repeatable and reliable across clusters

Renewable Energy Business Summit - 11/15/10

SLCC's Role As Energy Cluster Convener

Establish a Roadmap for Effective Assessment and Planning



Identify Primary Regional Resources

Identify Key Stakeholders

Evaluate Economic Landscapes

Identify Priorities for Energy

Identify Regional Resources & Capacity

Renewable Energy Business Summit - 11/15/10

ECAP Phase I and Phase II Findings

- Energy cluster has unique complexities:
  - Revision of Utah's energy policy
  - Federal policy and regulation associated with industry
  - Diversity of natural resources and application to industry
  - Integration of renewable and sustainable application to traditional non-renewable resource
  - On-going research and capacity building
  - ARRA funds application and impact

Renewable Energy Business Summit - 11/15/10

Strategic Insights

ENERGY CLUSTER DRIVERS

- Utah's Energy Industry Cluster is directly affected by Federal government policy, federal regulations and federal funding for research and development.
- Utah is one of the most difficult places to do business because approximately 85% of energy development in the state is located on public lands subjecting business development to federal controls.
- Environmental restrictions and threat of restrictions dramatically drive the economics of developing Utah's coal resources. Regional and national pricing drive the economics Utah's electric, natural gas and coal resources. Renewable energy resources are not price competitive because of lower energy prices in the Rocky Mountain region.

NON-RENEWABLE ENERGY SOURCES

- In general, the energy extraction industry is quick to adopt new methods, processes and technologies creating opportunities for innovative new service providers to the industry.
- The demand for oil refining has peaked and will decline in coming decades as alternative fuels and vehicles become more widely adopted.
- The abundance of natural gas resources in the country as well as the expanding capacity to ship liquefied natural gas will keep natural gas prices down.

ENERGY THERMAL AND ENERGY MANAGEMENT

- Federal funding for academic research in the areas of renewable is increasing and will continue to do so in the future. Very little federal funding is available for private sector research on energy efficiency initiatives. Significant federal tax credits and tax breaks are available for energy efficiency products and services.
- Opportunities are emerging for innovative, entrepreneur led companies to create energy related services and products that meet the demand for improving energy efficiency.

Renewable Energy Business Summit - 11/15/10

Strategic Insights
Continued

ACCELERATION STRATEGIES

- *Creating:* Utah's Energy industry will be accelerated by expanding the capabilities of current of innovative entrepreneur-led businesses in the fields of energy production, energy efficiency, energy management and energy storage.
- *Expanding:* Utah's Energy industry will be accelerated by expanding the capabilities of current businesses to address the growing needs for energy production, energy transportation, energy efficiency, rate of use management, shifting from one resource to another and storage.
- *Attracting:* Utah's Energy industry will be accelerated by attracting to the state businesses that require proximity to and access of a wide range of energy resources for research, development, testing, training and product development.

RENEWABLE ENERGY RESOURCES

- Although significant federal research funding is being invested in the areas of clean technology, it is too early to tell which technologies will result in the creation of a significant industry sector that is both sizable and stable as it relates to jobs.
- At this time, the renewable energy sectors that present the greatest business opportunities are solar photovoltaic, wind and geothermal.

Renewable Energy Business Summit - 11/15/10

ECAP Acceleration Strategy

- **Sustain the core: traditional** non-renewable resource development
- **Drive Growth Accelerators:** expansion, innovation, and specialization
- **Explore the Future**: resources, generation and transmission, consumption

Renewable Energy Business Summit - 11/15/10

Key Supporting Strategies

- ***Talent Development***: increased trained workforce
- ***Comprehensive state-sponsored research agenda:*** promote and sponsor a state agenda for research, innovation, and new technology
- ***Applied research in renewable technologies:*** consistent research and development of economically viable renewable energies
- ***Business expansion/attraction/creation***: expand oil refineries, increase regional demand for low-cost power, create energy efficient businesses
- ***Cluster Leadership*****:** link small company innovation with large company resources and needs

Renewable Energy Business Summit - 11/15/10

Questions?

Renewable Energy Business Summit - 11/15/10